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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/822,548	04/12/2004	Marc Seghatol	1550.36US03	1792

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EXAMINER	
BUTLER, PATRICK NEAL	

ART UNIT	PAPER NUMBER
1791	

MAIL DATE	DELIVERY MODE
10/31/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/822,548	SEGHATOL ET AL.	
	Examiner	Art Unit	
	Patrick Butler	1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 August 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,33 and 37* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,33 and 37* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 33, and 37 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 5 of U.S. Patent No. 6,737,619 B2 in view of Gonser (US Patent No. 3,868,513).

With respect to Claims 1, 33, and 37, Claim 5 of U.S. Patent No. 6,737,619 B2 teaches forming dental composites (part of a tooth; a hardened object; orthodontic element) from a resin matrix (curable polymer composition) and using a microwave energy source to polymerize the matrix (using a microwave source to apply microwave energy to harden said hardenable object).

Claim 5 of U.S. Patent No. 6,737,619 B2 does not teach a hand-held microwave source being employed in the method.

Gonser teaches using a hand-held energy source in-mouth to cure a resin (intra-orally harden) (col. 1, line 8-20).

It would be obvious to combine Gonser's method of using a hand-held energy source with the method of forming as taught by Claim 5 of U.S. Patent No. 6,737,619 B2 in order to expedite the process by easily doing the work at the tooth.

Claims 1, 33, and 37 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 10 of U.S. Patent No. 6,254,389 B1.

With respect to Claims 1, 33, and 37, Claim 10 of U.S. Patent No. 6,254,389 B1 teaches forming polymerized resin on a tooth (part of a tooth; a hardened object; orthodontic element) from a resin matrix (curable polymer composition) and using a hand-held microwave energy source intra-orally to polymerize the resin matrix (using a microwave source to apply microwave energy to harden said hardenable object).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 33, and 37 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Stangel et al (US Patent No. 6,605,051 B1).

Stangel teaches Claim 1 (See Stangel, Claim 1: preamble, (i), (i)(a), and (ii); col. 4, lines 36-40)).

Stangel teaches Claims 33 (See Stangel, Claim 3: preamble, (i), and (ii)).

Stangel teaches Claims 37 (See Stangel, Claim 4: preamble, (i), and (ii); and Claims 12 and 13).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 33, and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Podszun (US Patent No. 5,147,903) in view of Nakazato (US Patent No. 4,873,269) and Stevens (US Patent No. 5,421,727).

With respect to Claims 1, 33, and 37, Podszun teaches using polymeric methacrylates to make or fill teeth (see col. 1, lines 8-20).

Podszun does not appear to expressly teach curing by hand-held microwave.

Nakazato teaches using microwave to cure methacrylate material (see Abstract; col. 2, lines 39-45).

Stevens teaches a method of safely applying microwave energy in-mouth with a hand-held tool (see Abstract; fig. 2; col. 1, lines 13-57).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Nakazato's microwave energy using Stevens's in-mouth energy applicator in the method as taught by Podszun because using Stevens safe apparatus in-mouth allows for polymerization within a short time without causing porosity, limited deformation, and improved size accuracy (see Nakazato, col. 2, lines 39-62) while easily doing the work at the tooth.

Response to Arguments

Applicant's arguments filed 23 August 2007 have been fully considered but they are not persuasive.

Applicant argues with respect to the 35 USC 103 rejections. Applicant's arguments appear to be on the grounds that:

1) The motivation to combine the references is not an express and logical reasoning because Nakazuto's microwave energy used is merely a conventional oven and flask providing 500 W for 3 minutes. Human tissue in the mouth would be burned.

2) Stevens provides energy using an antenna not a microwave.

The Applicant's arguments are addressed as follows:

1) To clarify, the microwave of Nakazuto is relied upon to teach microwave energy's improvement over and suitability for curing dental resin of Podszun. Stevens shows safe practicing of in-mouth microwave use.

1) Moreover, the arguments of counsel cannot take the place of evidence in the record.

1 and 2) The oven is not relied up to teach the suitability of in-mouth oral usage; Stevens teaches that its hand-held unit is preferred for in-mouth use.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick Butler whose telephone number is (571) 272-8517. The examiner can normally be reached on Mon.-Thu. 7:30 a.m.-5 p.m. and alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on (571) 272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Patrick Butler
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Art Unit 1791

CHRISTINA JOHNSON
SUPERVISORY PATENT EXAMINER